

Please amend the claims as follows (this listing of claims replaces all prior listings):

1. (Currently amended) A method ~~for receiving data from a plurality of ports for processing by a plurality of processes~~, comprising:  
~~assigning, with a scheduler thread, one of the plurality of ports to one of the plurality of processes, with the one of the plurality of processes executing at least one thread;~~  
~~determining that additional data is available from the assigned port;~~  
~~scheduling processing of data received at a plurality of ports, the processing performed by a plurality of processing threads, including~~  
determining that one of the plurality of ports needs service,  
selecting one of the plurality of processing threads that is available to service the port,  
assigning the port to the processing thread, and  
~~awaiting notification by the one of the plurality of processes processing thread~~  
that processing of ~~the additional data received at the assigned port~~ has been completed prior to unblocking the port and re-assigning the port to one of the plurality of processes.
2. (Currently amended) The method of claim 1, ~~further comprising:~~  
~~determining if data is available from one of the plurality of ports wherein determining that one of the plurality of ports needs service comprises determining whether data is available at one of the ports.~~
3. (Currently amended) ~~The method of claim 1, wherein assigning further comprises:~~  
~~selecting one of the plurality of processes using the scheduler thread~~  
The method of claim 20, wherein the selecting is performed by the scheduling thread.
4. (Original) The method of claim 3, further comprising:

directing transfer of the data from the assigned port to the one of the plurality of processes for processing.

5. (Currently amended) The method of ~~claim 3~~ claim 1, wherein selecting comprises:

determining ~~using the scheduler thread~~ if any of the plurality of processes is available to process the data; and

if it is determined that one of the plurality of processes is available to process the data, choosing an available one of the plurality of processes.

6. (Previously Presented) The method of claim 1, further comprising:  
recording the port-to-process assignment on an assignment list.

7. (Previously Presented) The method of claim 6, further comprising:  
removing the port-to-process assignment from the assignment list upon receiving notification that the processing has been completed.

8. (Original) The method of claim 1, wherein the data comprises packet data.

9. (Original) The method of claim 8, wherein the packet data comprises a network packet.

10. (Original) The method of claim 9, wherein the packet data comprises a predetermined portion of a network packet.

11. (Original) The method of claim 9, wherein the network packet comprises an Ethernet packet.

12. (Original) The method of claim 1, wherein the one of the plurality of ports comprises a 10/100 BaseT Ethernet port.

13. (Currently amended) ~~An article comprising a computer readable medium which stores computer executable instructions for receiving data from a plurality of ports for processing by a plurality of processes, the instructions causing a computer to:~~

~~assign, with a scheduler thread, one of the plurality of ports to one of the plurality of processes, with the one of the plurality of processes executing at least one thread;~~

~~determine that additional data is available from the one of the plurality of ports; and,~~

~~await notification by the process that processing has been completed for the additional data prior to re assigning the one of the plurality of ports to one of the plurality of processes.~~

A machine-accessible medium, which when accessed results in a machine performing operations comprising:

scheduling processing of data received at a plurality of ports by a plurality of processing threads, including

determining that one of the plurality of ports needs service,

selecting one of the plurality of processing threads that is available to service the port,

assigning the port to the processing thread, and

awaiting notification by the processing thread that processing of data received at the assigned port has been completed prior to unblocking the port and re-assigning the port to one of the plurality of processes.

14. (Currently amended) The ~~article~~ machine-accessible medium of claim 13, wherein the ~~article further comprises instructions causing a computer to:~~

~~determine if data is available from one of the plurality of ports~~

determining that one of the ports needs service comprising determining if data is available from one of the plurality of ports.

15. (Currently amended) The machine-accessible medium article of claim 13, wherein the article further comprises instructions causing a computer to which when accessed, results in the machine performing operations comprising:

~~assign, with the scheduler thread, one of the plurality of ports to one of the plurality of processes, with the one of the plurality of processes executing at least one thread, using the scheduler thread to select one of the plurality of processes~~

using a scheduling thread to schedule the processing of data, the scheduling thread executing in parallel with the processing threads.

16. (Currently amended) The article-machine-accessible medium of claim 15, wherein the instructions to select one of the plurality of processes comprises instructions causing a computer to:

selecting one of the plurality of processing threads that is available to service the port comprises determining determine, using the scheduler thread, if any of the plurality of processes is available to process the data; and

choose, using the scheduler thread, choosing an available one of the plurality of processes if it is determined that one of the plurality of processes is available to process the data.

17. (Currently amended) The article-machine-accessible medium of claim 13, wherein the article further comprises instructions causing a computer to: which when accessed results in the machine performing operations comprising

record recording the port-to-process assignment on an assignment list.

18. (Currently amended) The article-machine-accessible medium of claim 17, wherein the article further comprises instructions causing a computer to: which when accessed results in the machine performing operations comprising

~~remove-removing~~ the port-to-process assignment from the assignment list upon receiving notification that the processing has been completed.

19. (Withdrawn) A processor comprising:

a microengine for executing threads, the threads including a receive scheduler thread and receive processing threads;

a bus interface for receiving data from a port, the bus interface for indicating to the receive scheduler whether the port has data available for processing by one of the receive processing threads; and

the receive scheduler thread assigning the port to one of the receive scheduling threads if the bus interface has indicated that the port has available data and directing transfer of the data to the assigned one of the receive processing threads for processing, the receive scheduler thread inhibiting the assignment of the port to one of the receive processing threads for the processing of new data until the assigned one of the receive processing threads has completed the processing of the data.

20. (New) The method of claim 1, wherein the scheduling is performed by a scheduling thread that executes in parallel to the processing threads.